DEPARTMENT OF VETERANS AFFAIRS

Justification and Approval

For

Other Than Full and Open Competition

Smart Phone Application for Postconcussion Symptom Reduction

- **1.** <u>Contracting Organization</u>: Department of Veterans Affairs, Network Contracting Office 8, James A. Haley Veterans Hospital, Tampa, FL. The purchase request number is 673-14-1-4340-0002.
- 2. Description of Action: This is a request for justification and approval for other than full and open competition for the procurement of technical services associated with artificial intelligence, natural language processing, human and computer interaction artificial dialogue systems from Vertical Product Development (VPD). VDP is a small business (NAICS Code 541511) located at 2224 Old Middlefield Way, Palo Alto, CA 94303. VDP are the original developers of the interaction artificial dialogue systems which are currently owned and operated by Veteran Administration Hospitals across the country for research, treatment, and understanding of Traumatic Brain Injury (TBI) in veterans. The services are requested by the James A. Haley Veterans Administration (JAHVA) Health Services Research and Development (HSR&D) / Rehabilitation Research and Development (RR&D) Center of Research Excellence (COE) to help JAHVA COE meet the goals and objectives of the research project named Post Concussion Symptom Reduction which is funded by an HSR&D grant. This action will support the "Traumatic Brain Injury Coach Project." (see VA grant research plan) The resulting action will be a firm fixed price contract for the development of a mirror image of the current version of the concussion coach smart phone application for the post-concussion symptom reduction. The exception to the requested mirror image of the concussion coach is that this version will include add-ons which will allow for collection of data and push notifications in support of the James A. Hailey Research and Development Department.

The action shall consist of the previous referred contractor delivering the concussion coach application in accordance with the statement of work within 80 days from the date of award and shall consist of technical support for a period of 2 years thereafter award date. This procurement will proceed on a sole source basis with mobile application developer Vertical Product Development.

3. <u>Description of Supplies or Services</u>: The project services support the overall mission of the Veterans Health Administration (VHA) by emphasizing the importance of clinical practice directed toward a TBI VA population. This project is particularly important in light of the increased emphasis placed by VHA in improving the quality and accessibility of healthcare. JAHVA COE's research focus is relevant to at least three of the sixteen current VHA

strategic initiatives for FY 2011-2015, including performing research and development to enhance the long term health and well-being of veterans.

VPD are the original developers of the current version of Concussion Coach. The VA holds the sole rights of the Concussion Coach which was developed by the contractor with encryption Federal Information Processing System (FIPS) 140-2 validation. The contractors' limits of rights to use data are in accordance with the Rights in Data-General under Federal Acquisition Regulation (FAR) 52.227-14(d) (1). The company will build upon their original version of Concussion Coach for the research project The Research and Development Department shall require a mirror (or "explorer" version) of the existing VA smart phone application (called 'app' hereafter), which is called 'Concussion Coach.' An explorer version is needed because the publicly available smart phone app does not allow collection of data.

The responsibilities of VPD or their designee(s) will include, but are not limited to the following:

- 1. Development of Concussion Coach Explorer
- 2. Collaborate with the content experts from the VA team during the design and implementation of functional requirements, as well as during the use of the app during the study.
- 3. Participate in the transfer of the Concussion Coach Explorer prototype data to the University of South Florida Server, installation and testing.
- 4. Participate in regular conference calls as needed.
- 5. Provide technical support and trouble shooting, should any problems arise during the duration of the study.

Vertical Product Development will develop version of the modified Concussion Coach for the Smart Phone Application for iOS. The total estimated cost of the app development to include technical support is \$35,000.

- **4.** <u>Statutory Authority:</u> FAR 6.302-3 (a) (1) (2)(ii). Full and open competition need not to be provided for when it is necessary to award the contract to a particular source or sources in order (ii) To establish or maintain an essential engineering, research, or development capability to be provided by an educational or other nonprofit institution or federally funded research and development center [41 USC 253 (c) (1)].
- 5. Validity of Use of Statutory Authority: This service is essential to decrease the postconcussion symptoms among veterans with traumatic brain injury (TBI). Vertical Product Development (VPD) is the sole contractor that is fully qualified to provide this service. Additionally, VPD are the original developers of the current concussion coach and are therefore the experts on the technical components of the application and the owners of the source code. Furthermore, the probability of error will be greatly minimized if VPD modifies their existing application to incorporate the VA's additions as described in the paragraph below. No other vendor offers the same level of expertise regarding the development of the concussion Coach.

Vertical Product Development: VPD handles all aspects of development – technical development, design, usability and packaging. They have contracted with VA in development of VA's current menu of smart phone applications (including development of PTSD Coach and Concussion Coach). As such, using any other vendor would require starting from scratch and developing the public-facing application first, followed by the research version. Since they developed the public-facing application for the VA, it is most cost and time-efficient to have them simply create the mirror (Explorer) version of the application for this research study. They are the only entity with this experience.

- **6.** Actions to Promote Competition: Vertical Product Development is the original developers for the Concussion Coach application and as such, the only vendor that can make changes to the existing application to ensure that the product is not compromised. No other vendors can provide this level of expertise; therefore no additional market research was conducted.
- **7. Determination of Fair and Reasonable Price:** The anticipated price to the Government is \$35,000. Based on market research, there are several similar contracts for cell phone applications which were developed by Vertical Product Development for other government agencies across the nation. These agencies included the Department of Veteran Affairs organizations. More specifically, the Palo Alto Veterans Administration in Palo Alto, California has a similar cell phone application in which the said product was recently developed from scratch. The cost for Palo Alto's application was approximately \$40K. Commercial Market research proved that the cost of cell phone application development could range from \$6,000 to \$12,000 weekly, depending on the complexity of the project application. At this rate the cost range for development would be approximately \$150.00 to \$300.00 an hour.

Addition to the new version of the concussion coach is the requirement in which the James A. Hailey Department of Veteran Affairs Research and Development Department will require technical support. This technical support shall conceivably equal to a period of performance for 24 months after development has been accepted for the concussion coach. Based on market research the average cost for this type of project management technical support for the concussion coach is approximately \$5,000 a year.

The James A. Hailey Department of Veteran Affairs has an expected and mandatory completion date of 80 days (11 weeks) after the contract is signed for the development of the updated version of the concussion coach. The sum of this expected completion time would normally add up to a cost of \$6,000 a week if this were a requirement in which the concussion coach was developed from scratch. This could send the requirement for the development of the concussion coach to a minimum cost of approximately \$69,000.

Other cost would include the project management technical support. This will equal to approximately \$10,000 for the entire period of performance. Therefore sum for the required action at a minimum level could equal to a total of \$79,000. (See chart below for cost comparisons)

	Cell Application	Project Management	Total Cost
	Development	Technical Support	
New Cost Minimum	\$69,000.00	\$10,000.00	\$79,000.00
New Cost Maximum	\$137,142.00	\$10,000.00	\$147,142.00
VDP Cost	\$25,000.00	\$10,000.00	\$35,000.00

However, the procurement is for the development of a mirror image of the current version of the concussion coach smart phone application for the post-concussion symptom reduction. Major changes are for add-ons for data collection and push notifications. The initial product has already been developed by Vertical Product Development. The fair and reasonable price estimate of the cost for development is extremely lower than the going rate for a new product development.

This contract is expected to be awarded at a Firm-Fixed Price rate of \$35,000 which is well under 50 percent of the going rate for a product developed from scratch. A new product could in cost from \$79,000 to \$147,142. Based on the factors in the above paragraphs, I determine that in accordance with FAR 13.106-3, that the price is determined to be fair and reasonable.

- 8. Market Survey (FAR 10): Every action is reviewed to determine its feasibility for competition. The subject services were carefully reviewed prior to the decision to establish a service contract with VPD. Although there are other national companies that offer commercial services, VPD is the only company with the appropriate history, resources and personnel who have experience conducting research and implementation of an application that meets government regulations and is a mirror to the existing application. At this time, JAHVA COE does not know of another company with the requisite expertise to provide the required services.
- 9. Other Considerations: VPD is currently providing the same services that meet all regulatory requirements to the VA by creating the public-facing smart phone applications. Based on market research, VPD is the only entity that can fully meet the Government's requirements, and therefore the Government is currently unable to seek efficient competition.
- **10.** <u>Listing of Sources that expressed, in writing, an interest in the acquisition:</u> There are no known sources but the proposed.
- 11. <u>Statement of Actions to Overcome Barriers to Competition</u>: "There aren't any actions that can be taken at this time to over competition barriers. The major barrier to competition is the fact that VDP does not allow distributors to develop, sale or distribute their product."
- **12.** Requirements Certification: I certify that the requirement outlined in this justification is a bonafide need of the Department of Veterans Affairs and that the supporting data under my cognizance, which are included in the justification, are accurate and complete to the best of my knowledge and belief.

Approvals in accordance with FAR 6.304

a. Station's Point of Contact: (required) I certified and complete to the best of my knowledge and be	
Har Jon	10 - 22 - 13 Date
Marco Starr	Date
COR	
Supply Technician	
b. Contracting Officer's Certification: (require accurate and complete to the best of my knowled Cyrouse H. Houshyani Contract Specialist Intern VISN 08	
c. NCM Designee: I certify the justification meet competition. Yamil Ø. Rodriguez Supervisor, Medical Sharing Team VISN 08	ts requirements for other than full and open 10-22-2013 Date